



waveport
WIRELESS MODEM WAVENIS®

Communication skills for ultra low powered objects



96 x 47 x 24 mm

WAVEPORT is a wireless modems family based on the patented Ultra Low Power technology designed by **CORONIS SYSTEMS**, called **WAVENIS**.

Connected to a PC, **WAVEPORT** allows to control and manage a wireless network made of **WAVENIS** embedded modules (sensors, meters, alarms... with radio communication capabilities).

WAVEPORT includes the radio front-end, the antenna and the whole enhanced wireless **WAVENIS** protocol to drive your wireless network featuring peer-to-peer, broadcast, polling and repeater modes.

WAVENIS is the optimum wireless technology which combines Ultra Low Power, long radio range, high reliability transmissions and cost effective solution.

TECHNICAL FEATURES

- Operating Frequency bands : 868/915 MHz
- Integrated antenna
- Frequency hopping spread spectrum (FHSS)
- Modulation : Gaussian Frequency Shift Keying (GFSK).
- Receiver sensitivity -110dBm at 9,6kbps with 0.1% BER
- Data rate up to 150kbps
- Radiated Output power : up to 25mW with integrated antenna
- Long Radio range :
 - Line Of Sight : up to 1km
 - Indoor : 200m typical
- Driver interface : USB or RS232
- OCX drivers for PC Windows 2000, Windows CE : compatible with VisualC++, Visual Basic,
- **Certification : EN300-220-1**

OPERATING CHARACTERISTICS

- License Free use (ISM bands).
- High reliability communications thanks to **WAVENIS** wireless protocol.
- Plug and Play installation in a **WAVENIS** wireless network.
- Selectable operating modes : peer to peer, broadcast, polling, repeater



Typical WAVENIS network controlled by an Waveport connected to a PC



ENVIRONNEMENTAL AND MECHANICAL CHARACTERISTICS

- Operating temperature range [-20°C ; +70°C]
- Size (Length/Width/Height) : 96 x 47 x 24 mm
- Weight < 50g

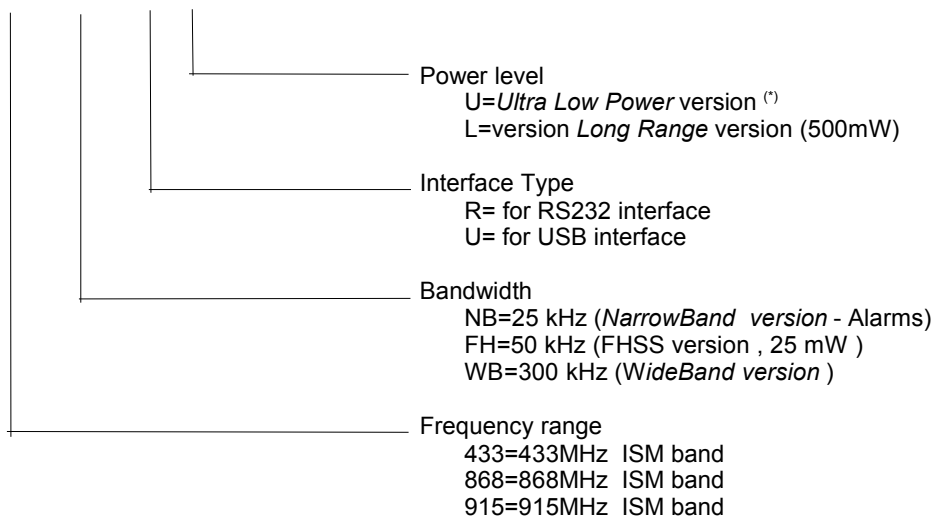
Bandwidth	25 kHz	50 kHz	50 up to 300 kHz
Data rate	4,8kbps	4,8 to 19,2kbps	19,2 up to 153kbps
FHSS or Dedicated channel	Dedicated channel (1 channel)	FHSS (16 channels)	Dedicated channel (4 channels)
Line of sight 25mW 500mW	1 km	1 km	300 m 5 km

FURNITURES

- Wall support
- USB version : USB connector (1m cable length)
- RS232 version : RS232 connector (1m cable length) and power supply (DC output voltage 4.5V-6V)
- OCX drivers and **WAVENIS** tool set user manual

Product selection guide

WAVEPORT-868-FH- R U



(*) Ultra Low Power
 Limitations :
 - 10mW @433MHz ETS300-220-1
 - 25mW @868MHz ETS300-220-1
 - 10mW @868MHz ETS300-220-1
 alarm dedicted 25kHz-channels
 - 1mW @ 915MHz FCC-15-249